DAMA: a VO-tool for the Darwin Mission

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Due to the large influence of the radiation of the parent star on the planet atmosphere, a careful target selection as well as a deep knowledge of their properties (as a way to estimate their fundamental parameters) and environments is a critical issue for the Darwin mission. The compilation of all this information is a time-consuming task that will need, most likely, to be repeated a number of times until the final satellite configuration is decided. Before the Virtual Observatory, the data compilation from more than one service was a very inefficient process done, most of the times, slowly and painfully by hand. The user needed to identify the services of interest, then, submit the same query for each one the services and, after gathering all the information, to tackle problems like unit conversion, flux calibration and/or data format. The Virtual Observatory (http://www.ivoa.net) is an international project that aims to solve this problem by the creation of a federation of astronomical archives and services that, with the implementation of new technologies and standards, provides an efficient access to the astronomical data. In the framework of the Spanish Virtual Observatory (http://svo.laeff.inta.es) an application to get all the relevant information of the potential Darwin candidates already available in astronomical archives and catalogues is being developed. The system is also prepared to include new observations performed during the preparatory observational roadmap. A preliminary version of the tool is already available (at present only for internal use) at http://sdc.laeff.inta.es/darwin.